

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims

What is claimed is:

19. (Amended) A method of operating a first router in a communication network comprising a plurality of routers, said first router having a plurality of interfaces to at least one connection-oriented non-broadcast multiple access network, said method comprising the steps of:

- assigning a local number to each of the interfaces;
- grouping the interfaces into connectivity classes;
- encoding information identifying the local numbers~~interfaces~~ and the connectivity classes into a link state packet; and
- transmitting the link state packet to at least one other routers in the communication network.

20. (Previously Presented) The method of claim 19 wherein the link state packet is an OSPF link state advertisement.

21. (Amended) The method of claim 19 wherein the information identifying the local numbers~~interfaces~~ and the connectivity classes is encoded into opaque fields of the link state packet.

22. (Amended) The method of claim 19 wherein the at least one connection-oriented non-broadcast multiple access network is an ATM network.